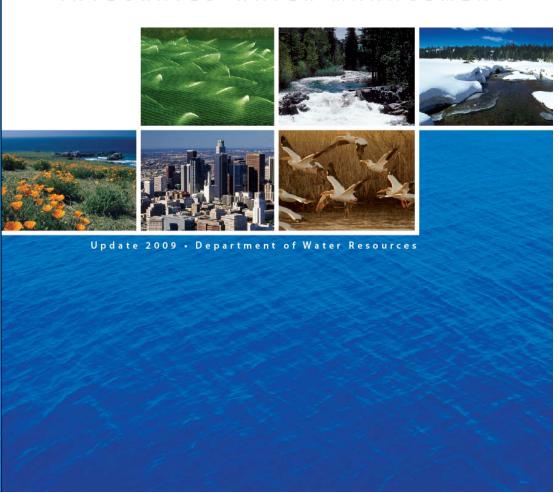
## California Water Plan Update 2009

**Accomplishments** 

Update 2013 Tribal Advisory Committee February 25, 2011

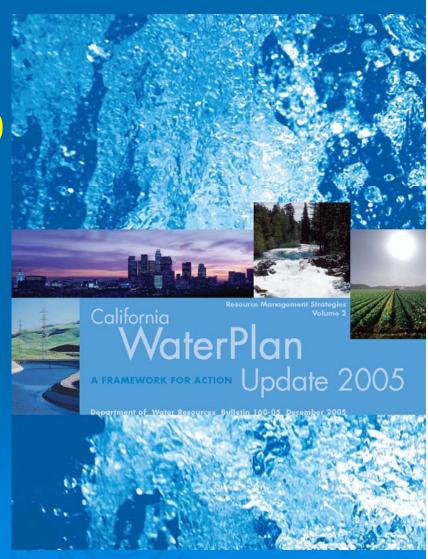
## California Water Plan Highlights

INTEGRATED WATER MANAGEMENT



### The California Water Plan

- > First published in 1957 as Bulletin 3
- Updated 9 times as Bulletin 160
   Update 2009 released Mar 2010
- Water Code requires DWR to update Water Plan every 5 years
   → next one in 2013
- Growing interest by Legislature & stakeholders
- Part of Governor's Strategic Growth Initiative
- Not a mandate & No appropriation



# Update 2009 – State's Blueprint Integrated Water Management & Sustainability

#### VISION

- Public Health, Safety, Quality of Life
- Vitality, Productivity, Economic Growth
- Healthy Ecosystem, Cultural Heritage

Foundational Actions for

## SUSTAINABLE WATER USES

- Use Water Efficiently
- Protect Water Quality
- Expand Environmental Stewardship

Initiatives for

## RELIABLE WATER SUPPLIES

- Expand Integrated Regional Water Managment
- Improve Statewide Water and Flood Management Systems

#### Secretary's Message

It is my pleasure to introduce the 2009 California Water Plan Update (Update 2009), which sets forth a blueprint for sustainability and forges a new direction for water management in California. Our new reality is one in which we must manage a resource characterized by uncertainty and vulnerability due to climate change and changing ecosystem needs. Our past hydrology is no longer an accurate indicator of the future.

This Water Plan follows the Update 2005 roadmap of strategies for sustainable water use but with an increased sense of urgency. Update 2009 reinforces the need to follow the principles of integrated water management – statewide and regionally – and to use water efficiently, improve water quality and reliability, and integrate environmental stewardship into every aspect of how we manage our water.



Update 2009 comes on the heels of a historic water legislation package passed by the Legislature and signed into law by Governor Schwarzenegger in November 2009. The landmark legislative package positions California for 21st Century water management by establishing new urban water conservation targets, requiring statewide groundwater monitoring, and creating a new framework for improved governance in the Sacramento-San Joaquin Delta.

The Resource Management Strategies in Update 2009 build upon the new legislation and chart a path forward into a future characterized by risk and uncertainty. There is a new urgency with which we must embrace water use efficiency in the context of climate change and increased urban demand. Improved water conveyance is a strategy from past Water Plans, but is now presented with renewed significance given the context of a Delta ecosystem in continued decline and the threats of seismicity and sea level rise.

New to this Water Plan is an integration of water resource management and flood management throughout the state. This approach aims to increase resiliency in our systems while yielding multiple benefits like increased public safety, habitat protection, and water supply reliability. A critical strategy in Update 2009 is the development of a reliable revenue stream to fund necessary system improvements and to invest in the continued resilience and robustness of California's water resources and the ecosystem that supports them.

Climate change and increasing demand have greatly reduced the flexibility and resilience of the last century's infrastructure investments. Now is the time to recognize our changed conditions and reinvest in that infrastructure in a sustainable manner. In addition to statewide improvements, local resource strategies such as conservation, water recycling, groundwater storage and conjunctive use, urban runoff management, and more can converge in the context of Integrated Regional Water Management (IRWM) planning.

The strategies outlined in these pages provide the means to manage resources comprehensively; from snowmelt to estuary, from field to tap, and all of the uses within the watershed.

California water management cannot be changed overnight, but Update 2009 and the momentum behind it provide the plan, tools, and strategies to achieve momentous change beginning now. I hope you will agree that Update 2009 is the state's blueprint for sustainability and integrated water management and marks a significant new chapter in the way California manages its water resources.

Lester A. Snow

Secretary for Natural Resources The Natural Resources Agency

# Secretary Snow's Message

"The strategies outlined in these pages provide the means to manage resources comprehensively; from snowmelt to estuary, from field to tap, and all of the uses within the watershed".

## Update 2009 Features

#### VISION

- Public Health, Safety, Quality of Life
- · Vitality, Productivity, Economic Growth
- · Healthy Ecosystem, Cultural Heritage

#### SUSTAINABLE WATER USES

- Use Water Efficiently
- Protect Water Quality
- Expand Environmental Stewardship

#### Initiatives for

#### RELIABLE WATER SUPPLIES

- · Implement Integrated Regional **Water Management**
- · Improve Statewide Water and Flood Management Systems
- Provides water community a framework & investment guide

  Array of strategies to achieve multiple goals & benefits
- Integrates 2009 Comprehensive Water Legislation and State government companion plans, initiatives & strategies

  Inform the 115+ near- and long-term actions
- Includes future scenarios to consider uncertainty & risk
  - → Advocates greater value on sustainable outcomes than on water supply extraction

### Update 2009 Features

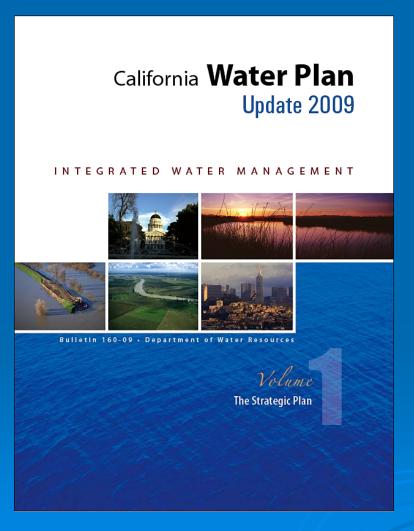
- Advances strategies for Integrated Flood Management & Climate Change adaptation & mitigation
- Describes 27 resource management strategies to diversify regional water portfolios & increase regional self-sufficiency
- Outlines new data, analytical methods and tools for integrated water management
- Updates 12 regional reports with:
  - IRWM partnerships & planning Water portfolios 1998 2005

  - Water quality conditions
  - Flood management
  - Future scenarios to 2050



Collaboration DWR & Public Other State Agencies **Advisory Committee Multi-Disciplinary** Communities of Interest **Project Team** Statewide Organizations Water Plan Steering Committee **Work Teams** Regional Leads State Agencies State staff working Analytical Tools & Data Regional Forum & Workshops with Regional Efforts Communications Planning Seek Input & Advice **Drought Planning** Communities of Place Regional Reports Federal Agencies Local Agencies & Governments Environmental Water Facilitation CA Native American Tribes Integrated Flood Management Land & Water Use **Extended Review Forum** Resource Management < Plenary > Strategies Interested Public Water Supply & Balance Everyone Water Quality Statewide Water Analysis Network (SWAN) Scientists & Engineers Information Exchange & Data Integration Climate Change Shared Analytical Tools & Methods

### Water Plan Update Organization

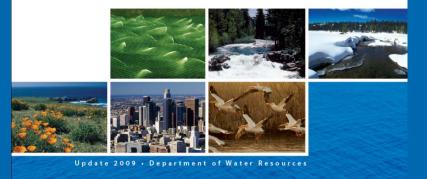


- Water Plan Highlights
  - CD Entire Water Plan
  - CD Tribal Water Summit Proceedings
- ➤ Vol. 1 > The Strategic Plan
- Vol. 2 > 27 Resource Management Strategies
- ➤ Vol. 3 > 12 Regional Reports
- Vol. 4 > Reference Guide (120+ articles)
- Vol. 5 > Technical Guide (Online documentation)

## Water Plan Highlights

## California **Water Plan**Highlights

INTEGRATED WATER MANAGEMENT



# Director Cowin's Foreword

"Update 2009 spells out the urgencies that demand action: dealing with longer and more pronounced droughts, increased flood risk, threats to the environment, impaired water bodies, and aging infrastructure".

#### **Foreword**

Water Plan Update 2009 epitomizes collaboration. It reflects the perspectives of many and varied individuals, groups, and government entities representing the full spectrum of issues, concerns, and visions for the future of water management in California. Update 2009 has been enhanced by the leadership of 21 State agencies and departments that oversee or carry out water-related activities. Federal, Tribal, regional, and local entities helped shape the strategic plan—its goals, objectives, and recommendations—and 27 resource management strategies that are key to success.

Update 2009 reflects a new reality for resource management, a blueprint for sustainability, and a new direction for water decisions. This reality includes significant challenges: ecosystems in peril, the uncertainties of climate change and sea level rise, and population growth to name just a few. Update 2009 also spells out the urgencies that demand action: dealing with longer and more pronounced droughts, increased flood risk, threats to the environment, impaired water bodies, and aging infrastructure.



The Water Plan's outreach to Native American Tribes brought about a Tribal Communication Plan and culminated in the first of its kind California Tribal Water Summit in 2009. Update 2009 also introduces new water planning methods with the use of scenarios and response packages while evaluating the effects of future climate change.

This Water Plan marks a dynamic new approach to the way California manages its water resources—statewide and regionally. We must adapt California's water systems more quickly and effectively to keep pace with ever-changing conditions. With new urgency, regions must develop and implement truly integrated regional water management plans as roadmaps to meeting future water demands in sustainable ways. We must also continue our efforts at the statewide level to develop and implement plans for a sustainable Delta and to improve our flood management system. To assure balanced, effective solutions are implemented, we must develop long-term, reliable funding methods to make necessary system improvements and to invest in the continued resilience of California's water resources and the ecosystem that supports them.

In November 2009, the Legislature passed and Governor Schwarzenegger signed a comprehensive water package which is integral to Update 2009. Today, State government has the responsibility and opportunity to work with local partners within a new Delta governance structure to complete and implement plans for improving both the Delta ecosystem and the reliability of water supply derived from the Delta. We also must step up our efforts to integrate this work with our ongoing responsibilities to develop a Central Valley Flood Protection Plan, implement the FloodSAFE California initiative, and improve water storage statewide.

Regional water planning and management is essential for solving California's water issues. Local governments, agencies, and stakeholders have the best understanding of their water management challenges. DWR and other State agencies must partner with local agencies and governments to advance Integrated Regional Water Management, and to implement the new requirements for water conservation and groundwater monitoring. State government can provide expertise, technical assistance, and other essential support activities.

The California Water Plan Update 2009 will help chart our course toward more sustainable, integrated resources management. In broad strokes, this means considering water supply reliability, flood protection, water quality, and environmental stewardship in all resource management decisions. By doing so, we increase our chances of realizing the Water Plan's vision: a productive economy, healthy ecosystem, and desirable quality of life for all Californians.

May a Cher

Mark W. Cowin, Director

## Strategic Plan Elements double foldout 12A – 12D

Desired future for CA water& Purpose of Water Plan

Desired outcomes for the 2050 planning horizon

➤ Core values & philosophies

Statements of intent
/ Focus on what & when

Removing impediments & leveraging opportunities

Vision & Mission

7 Goals

10 Guiding Principles

13 Objectives & 115+ Actions

9 Recommendations

## 3 I's - Invest in Innovation & Infrastructure

California State Government in partnership with others should invest in water innovation & infrastructure to support integrated water management and sustainable outcomes

#### Investment - Finance Plan

- Stable funding with focus on innovation investments
- Seed money to incentivize infrastructure improvements

#### Innovation

- Governance improvements
- Planning & public process improvements
- Information technology (data & tools)
- Water technology R&D

#### Infrastructure

- Regional projects
- Inter-regional projects
- Statewide systems

#### VISION

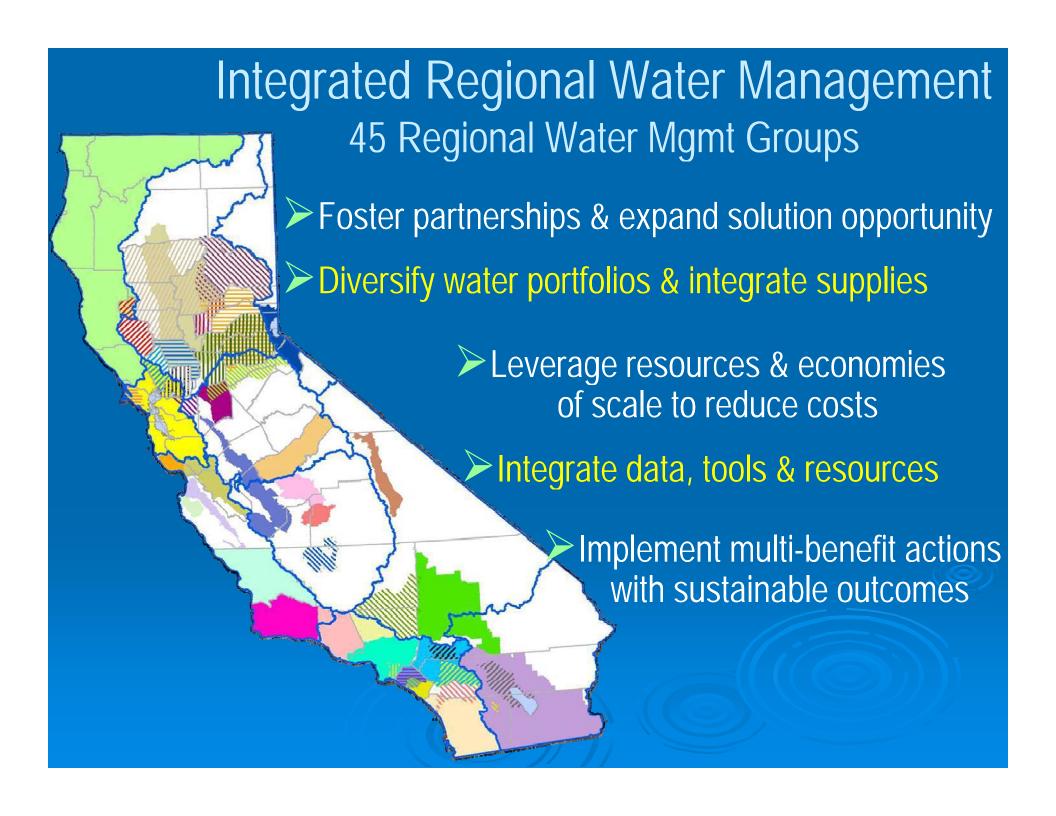
- Public Health, Safety, Quality of Life
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- Use Water Efficiently
- Protect Water Quality
- . Expand Environmental Stewardship

### Initiatives for RELIABLE WATER SUPPLIES

- Implement Integrated Regional Water Management
- Improve Statewide Water and Flood Management Systems



Integrated Flood Management

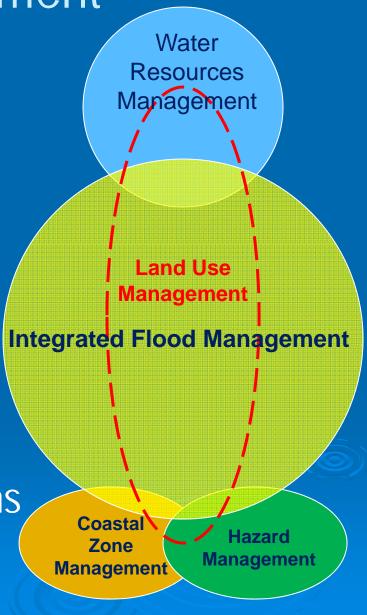
Comprehensive approach to flood management

Considers land & water resources at watershed scale

Minimizes loss of life and property damage from flooding

Maximizes benefits of floodplains

Recognizes benefits to ecosystems from periodic floods



Adapted from World Meteorological Organization 4

## 2010 Drought Contingency Plan

Part of the CA Water Plan Objective 8



- Recommends Drought Actions
  - Before --- Preparing for
  - During --- Responding to
  - After --- Recovering from
- Provides Interagency coordination framework
- > Promotes efficient & effective resource use

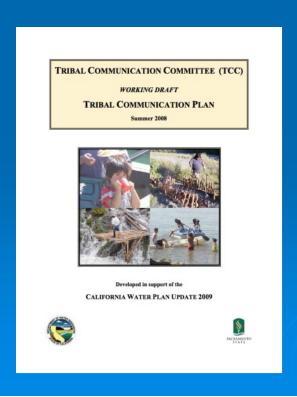
# Improving Coordination Land Use Planning & Water Management

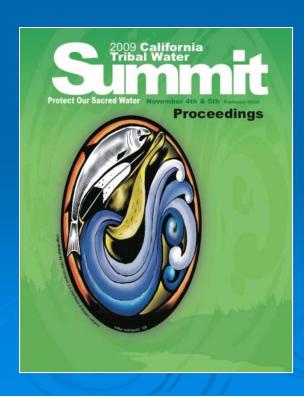


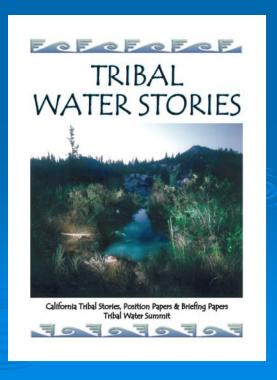
- Land use planning controlled locally
- Water management decentralized -over 2,300 counties, cities, public agencies, and private water companies
- IRWM coordinates land use planning with water supply, quality, flood management, and climate adaptation
- State Government provides technical assistance and financial incentives
- More coordination among State agencies & with IRWM Partnerships

### CA Native American Participation

- Developed Tribal Communications Plan
- Convened 2009 Tribal Water Summit
- Compiled Tribal Water Stories







## Tribal Engagement for Update 2009 Tribal Communication Committee & Plan

TRIBAL COMMUNICATION COMMITTEE (TCC)

WORKING DRAFT

TRIBAL COMMUNICATION PLAN

Summer 2008



Developed in support of the

CALIFORNIA WATER PLAN UPDATE 2009

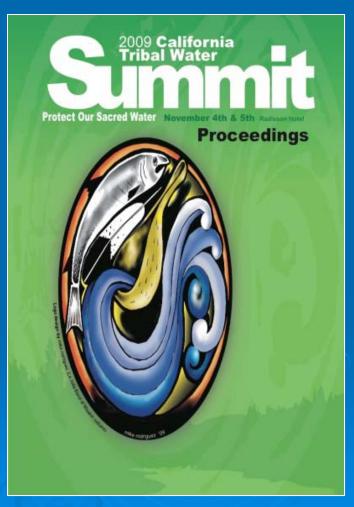




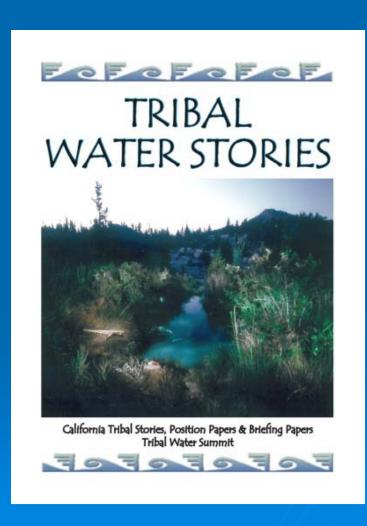
- Convened a TCC in late 2007
- Draft Tribal Communication Plan in mid-2008 - First for State government
- TCP fostered Tribal engagement in the Regional and Resource Management Strategy workshops
- TCP included the goal of hosting a statewide Tribal Water Summit during Update 2009

## Tribal Engagement for Update 2009 2009 California Tribal Water Summit

- Convened Tribal Water Summit Planning Team in late 2008
  - Hosted 7 regional plenary meetings
  - Included 8 State & 4 Federal agencies
- > About 300 people attend on Nov 4 & 5
  - Leaders and representatives from 66 CA Tribes, 15 Tribal Organizations, 13 State & 8 Federal agencies
  - Proceedings Booklet online, in Reference Guide & hard-copy; Summit video online
- Many Recommendations in Proceedings



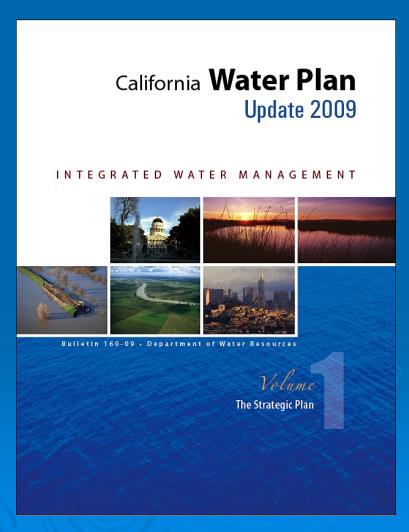
## Tribal Engagement for Update 2009 Tribal Water Stories



- Tribal Water Stories recorded and shared in two ways
- Over a dozen water stories video-recorded at the Summit and video available online
- Planning Team Subcommittee published Tribal Water Stories

### California Water Plan Update 2009 Objective – Improve Tribal Water & Resources

- One of 13 Water Plan Objectives
- Develop Tribal consultation, collaboration, and access to funding for water programs and projects to better sustain Tribal water and natural resources
- ➤ 12 Related Actions several taken from the Tribal Communication Plan



### Ways to Access Water Plan Information

Visit the Water Plan Web Portal www.waterplan.water.ca.gov







Subscribe to Water Plan eNews
a weekly electronic newsletter
www.waterplan.water.ca.gov/enews